My NASA Data - STEM Career Connections

ENGINEERING: Geotechnical Engineer

Education

A geotechnical engineer requires a bachelors of science degree in geotechnical engineering or civil engineering. A core background in mathematics is needed, as well as computer-aided design (CAD) to create, analyze, and review of designs. Masters and/or Ph.D. are suggested for advanced careers in teaching or professional engineering.

Related Fields

- Structural Engineer Link
- Environmental Engineer Link
- Transportation Engineer Link
- Water Resource Engineer Link
- Construction Engineer Link

Work Description

A geotechnical engineer is a type of civil engineer who focuses on the mechanics of the land, rocks, and soils in the building process. This type of engineering includes, but is not limited to, analyzing, designing, and constructing foundations, retaining structures, slopes, embankments, roadways, tunnels, levees, wharves, landfills, and other systems that are comprised of rock or soil.

Why is this job Important?

Geotechnical engineering is an important field because it is concerned with the behavior of earth materials. These engineers design foundations for structures, embankments, storage systems for hazardous materials, and decreasing soil erosion.

Salary Range

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$75,000 - $100,000

NASA Connections

Job Title NASA Examples:

- Civil Engineering
- Structural Engineering
- Environmental Engineering
- Mechanical Engineer

- Transportation Engineering
- Water Resources Engineering
- Construction Engineering

NASA Career Links:

- NASA Careers Link
- NASA Internships & Fellowships Pathways Link
- NASA Student Volunteer Program Link
- Working for NASA Link